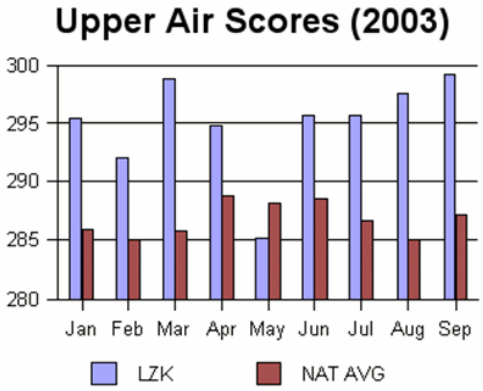
As you can see, the collection of this data is not as simple as you might believe. It is a very lengthy and labor intensive process. Once the weather balloon is launched, the observer must quality control a steady and continuous stream of weather data. The observer will often toss out data he or she considers to be unrepresentative of the environment. While it is a lengthy process, it remains the single, most efficient way to obtain upper air information vital to National Weather Service Operations.

Applications of the data include:

- Input for computer-based weather prediction models, essential to forecasting
- Local severe storm, aviation, and marine forecasts
- Weather and climate change research
- Input for air pollution models
- Ground truth for satellite data.

NWS upper-air station performance is scored and ranked to help improve data availability, quantity, and quality. Many factors go into the rankings including timeliness of the data, quality of the data and amount of data collected.



The Little Rock office (LZK) continues to perform above the national average and is one of the premier upper air sites in the nation.

September was another great month for the Little Rock team. Our September score was 299.07 out of a possible 300. This score was good enough to place us as the 3rd highest ranked upper air site in the nation for the month of September! For the 7th consecutive month we were the highest ranked Southern Region site based on our 12 month average of 294.79 and 5th highest in the country. Kudos to the Little Rock National Weather Service upper air observation team for a job well done.

Rain vs. Snow ratio -

A question we get asked often at the weather service is "How much snow equals one inch of rain"? The most common ratio used is that 10 inches of snow will melt to one inch of water. However, that is a very rough approximation. The amount of snow that falls depends on many factors including moisture content, temperature and humidity of the air. Light, powdery snow can have a ratio as high as 30 inches of snow to one inch of rain while heavy wet snow can have a ratio as small as two to one.